TANTALUS OR THE FUTURE OF MAN KAROTEO - 1963

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TANTALUS

OR

The Future Man

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Man never is, but always to be, blest

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PREFACE

I rather anticipate that superficial critics who do not like the argument of this essay will accuse it of pessimism. a charge which perhaps means little more than that they do not like it. Nevertheless, it may be worth while to point out, (I) that pessimism is not a logical objection to a contention of which the truth cannot otherwise be questioned, and (2) that though the argument of Tantalus may be said generally to corroborate that of Daedalus and Icarus, yet its conclusion is much less pessimistic than theirs, because (3) it makes it very plain that the evils which threaten the future of mankind are in no case unavoidable. If it is called

PREFACE

'pessimism' to point out the methods by which men may escape destruction, because men do not care to adopt them. I suppose it must be 'optimism' to rush violently and open-eyed down a precipice and to expect to be saved by a miracle. Certainly such would appear to be the belief upon which human affairs are at present conducted.

F.C.S.S.

PROLOGUE: THE ORACLE OF THE DEAD

When I read in Mr Haldane's Daedalus the wonderful things that Science was going to do for us, and in Mr Russell's Icarus how easily both we and it might come to grief in consequence, it at once became plain to me that of all the heroes of antiquity Tantalus would be the one best fitted to prognosticate the probable future of Man. For, if we interpret the history of Daedalus as meaning the collapse of Minoan civilization under the strain imposed on its

moral fibre by material progress, and the fate of Icarus as meaning man's inability to use the powers of the air without crashing, one could gauge the probability that history would repeat itself still further, and that man would once more allow his vices to cheat him of the happiness that seemed so clearly within his reach.

I determined, however, to confirm this intelligent forecast by consulting Tantalus himself. To consult the oracle of a dead hero, it was, I knew, only necessary to undergo the process of 'incubation,' a sort of camping out on his tomb, in the skin of a sacrificial beast; and fortunately the tomb of Tantalus had just been discovered in Phrygia by the archæologists of the British School at Athens.

I set out, therefore, with great promptitude, and in due course arrived at the ruins of the tomb of Tantalus. They did not much resemble a firstclass hotel, and, of course, my idea of an 'incubation' was well laughed at, but I managed to find a pretty level corner, more or less sheltered from the wind. Here I wrapped myself up in my excellent rug, having decided to dispense with the more correct method of ensconcing myself in the gory hide of a sacrificial ox. The night was fine, though cold, and fortunately there were no mosquitoes, nor any of the other insects one would inevitably have encountered in the dwellings of the living. But the ground was very, very, hard, and I tossed about for hours, regretting my classical education and the psychi-

cal researcher's rashness in trying foolish experiments.

At last I fell asleep—at least I suppose so. I also fell a great deal further. I seemed to go right through my rocky bed, and to fall down, down, down, interminably, through a sort of elastic space. When at last the not wholly unpleasant moti onstopped, I found myself in a vast, grey, sandy plain, illuminated by a cold grey light as though of dawn. The only thing to catch the eye was a small round hummock, not very far from me. On it grew a mighty tree, with dark green pointed leaves and drooping branches, surrounded by a gleaming white fence or paling. I naturally walked towards it.

As I got near, I noticed that the

white paling, which completely enclosed the hummock, was composed of bones, or rather of every imaginable sort of spine, tooth, and sting, garnished with the saws and swords of sawfish and swordfish, and all knit together into an impenetrable cheval de frise that prevented approach to the foot of the tree. The soil all round this strange hedge had apparently been trodden into deep mud by some creature that had walked round and round the tree, and the water required for its manufacture was supplied by a small spring which rose within the enclosure and flowed out through its interstices.

As I walked round the tree to the further side of the hummock, I came upon an extraordinary sight. I beheld a naked man trying to reach some of

the fruit that dangled down from the outer branches of the tree but appeared to be just out of his reach, and so intent upon his design that he did not notice my approach. He seemed a tall man, and the upper part of his body was well formed. His features were good and regular, though somewhat hard, and not intellectual; his resolute jaw bespoke the man of action, accustomed to command and to be obeyed. So far, his appearance would have done credit to any modern captain of industry. But the lower half of his body appeared to be misshapen. His thighs were so curved that he could not walk upright, but had to stoop and lean forward as he slowly shambled along. Still more monstrous seemed the feet. with which he churned up the mud

around the fence; they were enormous and hardly seemed human in their shape, though they were too deeply plunged in the mud to permit one to see what exactly was wrong with them.

This strange being, whom the bold intuition of the dream-consciousness at once identified with Tantalus, was evidently trying to grasp the fruit that hung from the lower branches of the tree. For a while his efforts were vain. but then a gust of wind brought within his reach a large conical shining red fruit he had long coveted. It was one of the strange features of the tree that it was covered with fruit, and higher up also with flowers, of the most various sizes, shapes, and colours. He seized it triumphantly; but the effect was surprising. For he had hardly

touched it when it exploded, and covered him from head to foot with its blood-red juice. He at once sank senseless to the ground. But, after a while, he slowly recovered, and recommenced his old game. This time, he attacked a large round yellowish fruit; but when he succeeded in seizing it, it too exploded, and poured out upon him volumes of a heavy yellow-green vapour. Again he collapsed, and this time his stupor lasted longer.

By the time he began to stir again I had, I thought, grasped the situation, and determined to intervene. So I drew near, and addressed him: "Can I be mistaken in thinking that I see before me the far-famed hero, Tantalus, boon companion of the gods?" "And their victim." "And what tree is

this, I pray you, about which you busy vourself?" "The Tree of Knowledge." "And the water, which you have trampled into mud, is what?" "The Elixir of Life." "Then you seem to have all the materials for a happy life. Why don't you eat of the fruits of the tree, and drink of the elixir?" "You have seen the results of my efforts." "I cannot but think you have been unfortunate in your choice of the fruits: there are many that look much better higher up." "And how am I to get at them?" "Well, of course, you must break through all these débris of former animal life, which bar your access to the trunk of the tree, and prevent you from drinking of the water of life; after that, you can climb up the tree, and pick the best of the

fruits." "And how am I to break through the barrier of bones?" "Even though you appear to have no instruments, you can surely find a stone?" "Where shall I find a stone in the Plain of Forgetfulness? And besides, how should I climb the tree with these feet?" And he lifted up one of his monstrous limbs. "Certainly you seem to be pretty badly earthbound," said I, "but I will try to find you some stones."

So off I set. I had not got far when a fierce blast struck me and peppered me with sand. I struggled stoutly against it, but was nearly choked. And then, suddenly, I awoke to find that day was dawning and that the wind had gone round to the north, and was blowing in my face. But I was well satisfied with

my experiment. The interpretation of the response I had obtained from Tantalus was too plain to need the aid of a psycho-analyst. Our best prophets are growing very anxious about our future. They are afraid we are getting to know too much, and are likely to use our knowledge to commit suicide, or rather, mutual murder, after the fashion of the Kilkenny cats.

To these dismal forecasts it is reasonable to reply that there is nothing novel in the present situation. The human race has always known enough to wreck itself, and its abounding folly has always inspired its wise men with the gravest apprehension for its future. Yet, either by chance or providence, it has always known also how to avoid destruction. It has never known enough to make itself happy; nor

does it know enough to do so now. Its future has always been precarious because it has always been uncertain whether it would use its knowledge well or ill, to improve or to ruin itself. It has always had a choice between alternative policies, and it has so now.

What sense then is there in making such a fuss about the present crisis? It is a particularly plain case of the perennial choice of Hercules. What is needed is just a little clear thinking and plain speaking to a society more than usually debauched by a long regime of flattery, propaganda, and subterfuge. Mankind can make a fool of itself, as it always could; if it does, its blood will be on its own head. For it has knowledge enough to avoid the dangers that threaten it, if it will use its knowledge properly.

The first fact to be enunciated plainly, and faced, until it grows familiar, and its import is appreciated, is that, biologically speaking, Man has ceased to be a progressive species long ago. The evolutionary impetus which carried our ancestors from the level of the ape or even of the lemur, through such subhuman types as Pithecanthropus, and the Heidelberg and Neandertal men, to 'modern' man, seems to have spent itself by the middle of the palæolithic period, i.e. say, thirty thousand years ago. At any rate, the Cro-Magnon people of the Aurignacian age, who then appeared upon the scene, were in no wise inferior to any subsequent race of men, either in stature or

in brain capacity. They averaged six feet three inches in height, with onesixth more brains than the modern European. So far indeed as their physical remains can indicate, they seem to have been very definitely the finest race of human beings that has ever existed. If we have improved on them, it has probably been only in such minor matters as resistance to the microbes of the many diseases which flourish among dense populations under slum conditions. Against that probability have to be set such certainties as that our toes and many of our muscles are being atrophied and that we are getting more liable to caries and haldness

This remarkable fact of the arrest of his biological development is certain-

ly the greatest mystery in the history of Man. It at once raises two further questions: In the first place, how did it happen, and what caused it? And, secondly, what has enabled man, nevertheless, to progress in other respects, in knowledge, in power, and in culture?

To answer the first question we cannot do better than argue back from what is now the most salient feature about man's biological position, namely that his survival is determined far more by his relations to the social group to which he belongs than by personal efficiency: hence he can draw on the collective resources of his tribe, and, to a growing extent, gets emancipated from the control of natural selection. Thus social selection and the survival of societies profoundly modify (and

often defeat), the working of natural selection. The advantages are obvious; it is no longer essential for a member of a society that collectively controls the conditions of existence to develop any high degree of personal capacity, in order to survive. A single wise and provident minister, like Joseph, is enough to keep alive millions of Pharaoh's subjects through the lean years of famine. But the inferior and incompetent survive with the rest.

Now, if we suppose that by midpalæolithic times man had established his ascendency over nature and perfected his social organization sufficiently to render these services to his fellows, we have suggested a possible cause of the cessation of biological progress. For social influences are as likely as not

to be 'contra-selective,' that is, to tend to preserve by preference the stocks which are less viable from a merely biological point of view. They are markedly so at present, and it would be asking too much to expect the tribal chiefs of early men to have been wise and provident enough to see to it that their social institutions were eugenical in their effects. We cannot even now find such a pitch of wisdom and providence in the controllers of our destinies.

The answer to the second question is much easier. The human race has continued to progress in its culture, in its knowledge, in its power over nature, because it has devised institutions which have created for it a continuous social memory that defies death. Now, as ever, the wisest and the best must die, while their place is taken by babies born as ignorant and void of knowledge as in the beginning. Only there has been invented apparatus which relieves the civilized baby of his hereditary ignorance, and renders him potentially the heir to all the wisdom of the ages.

In the first place, Language not only extends enormously the possibilities of

co-operation and common action, but also renders possible the consolidation of customs and their preservation by oral tradition. In the next place, Writing enables a society to record all that it considers worth remembering. Upon these two inventions may be reared vast intricate structures, religious, political, social, and scientific, which knit together and dominate human societies from generation to generation, and create the conditions for an almost mechanical accumulation of knowledge.

Man has thereby become an educable creature and fallen a victim to the arts of the examiner. Provided the mechanisms of education do not get out of gear, it is hard to set limits to the amounts of knowledge with which he can be crammed; but it is clear that

they are far greater than he could ever have acquired in a lifetime for himself. And as education (of sorts) has now become world wide, it might seem that the future of knowledge was now assured, and no longer liable to setbacks such as those due to the famous burning of the library of Alexandria at the command of the Caliph Omar, or the extinction of the only Greek scientists who seriously concerned themselves with the applications of science to life, of Archimedes and his School, in the sack of Syracuse. At any rate, it seemed clear that progress in knowledge could continue indefinitely, even in an otherwise stationary or decadent society.

Whoever argued thus would fail to make sufficient allowance for the

perversity of human nature. Human institutions, like the human body, are ever tending to get clogged with the waste products of their own working. Hence, so far from performing the functions for which they were intended, they are constantly becoming the most formidable instruments for their frustration. Experience shows how easily Churches become the most effective deadeners of religious zeal, how often Law becomes the negation of justice. how deadly is the School to the inborn craving for knowledge which seemed to Aristotle so characteristic of man's nature.

Accordingly, no one familiar with the actual working of academic institutions is likely to fall into the error of pinning his faith to them. They are, of course,

designed for the purpose of preserving and promoting the highest and most advanced knowledge hitherto attained: but do they anywhere fulfil this purpose? Its execution must of necessity be left to professors not exempt from human frailty, always selected by more or less defective methods, whose interests by no means coincide with those of their subjects. The interest of the subject is to become more widely understood and so more influential The interest of the professor is to become more unassailable, and so more authoritative. He achieves this by becoming more technical. For the more technical he gets, the fewer can comprehend him; the fewer are competent to criticize him, the more of an oracle he becomes; if, therefore, he wishes

for an easy life of undisturbed academic leisure, the more he will indulge his natural tendency to grow more technical as his knowledge grows, the more he will turn away from those aspects of his subject which have any direct practical or human interest. He will wrap himself in mysteries of technical jargon, and become as nearly as possible unintelligible. Truly, as William James once exclaimed to me, apropos of the policy of certain philosophers, "the natural enemy of any subject is the professor thereof!" It is clear that if these tendencies are allowed to prevail, every subject must in course of time become unteachable, and not worth learning.

Thus educational systems become the chief enemies of education, and [30]

seats of learning the chief obstacles to the growth of knowledge, while in an otherwise stagnant or decadent society these tendencies sooner or later get the upper hand and utterly corrupt the social memory. The power of the professor is revealed not so much by the things he teaches, as by the things he fails or refuses to teach.

History is full of examples. How many religions have not perished from ritual sclerosis, how many sciences have not been degraded into pseudosciences or games! Logic has been just examinable nonsense for over two thousand years. The present economic chaos in the world has been indirectly brought about by the policy adopted by the professors of economics forty or fifty years ago, to suit their

own convenience. For they then decided that they must escape from the unwelcome attentions of the public by becoming more 'scientific'; i.c. they ceased to express themselves in plain language and took to mathematical formulae and curves instead; with the result that the world promptly relapsed into its primitive depths of economic ignorance. So soon as the professors had retired from it, every economic heresy and delusion, which had been exposed and uprooted by Adam Smith, at once revived and flourished. In one generation economics disappeared completely from the public ken and the political world, and the makers of the Peace Treaties of 1919 were so incapable of understanding an economic argument that

not even the lucid intelligence of Mr Keynes could dissuade them from enacting the preposterous conditions which rendered impossible the realization of their aims." Nor was it so very long ago that, in order to save the Mathematical Tripos at Cambridge, it had to be recast, because it had degenerated into an intellectual jig-saw puzzle, wholly unrelated to the applications of mathematics to the other sciences. To avoid jealousies, I hasten to add that the University of Oxford, which has organized itself as an asylum for lost causes, skilfully cultivates. by means of its classical and historical

^{*} The most absurd perhaps was the clause, appearing in all the Peace Treaties, which made 'reparations' a first charge on all the assets of the defeated countries. This, of course, completely destroyed their credit, and incapacitated them from raising a loan, forcing them to have recourse to progressive inflation, and so into bankruptcy.

studies, a backward-looking bias in its alumni. The true 'Greats' man is meant to go down indelibly imbued with the conviction that in matters of morals and politics nothing of importance has been discovered or said since Plato and Aristotle, and that nothing else matters.

Clearly then we cannot take for granted that in any society knowledge can progress without limits, nor can we count on our academic institutions to save us from stagnation and decay, even in matters of knowledge. All institutions are social mechanisms, and all mechanisms need a modicum of intelligent supervision, in the absence of which they become dangerous engines of destruction.

It appears then that we can extract no guarantee of progress either from the nature of Man or from the nature of human institutions. There is no law of progress, if by law be meant a superior power able to coerce the creatures that are said to 'obey' it. Neither can we extract from history any proof of the superiority of civilized man over his uncivilized ancestors. Such progress as has been attained has been achieved only by the active co-operation of the progressive organisms: every step has been fought for, and progress has ceased whenever

effort ceased, or was switched off into different directions.

Consequently, modern man has no right to 'boast himself far better than his fathers '-in intrinsic quality. Intrinsically, i.e. apart from the effects of culture and social training, it is probable that he is slightly in/erior in capacity to his own ancestors, while very markedly inferior to the great races of antiquity (like the Greeks) in their hey-day. Nor is there any reason to suppose that his moral nature has changed materially. Modern man may be a little tamer and bettertempered, because he has been herded together much more closely than primitive man, and city life, even in slums, demands, and produces, a certain 'urbanity.' For many generations

those who would not pack tight and could not stand the strain of constantly exhibiting 'company manners' and accommodating their action to those of their fellows, must have fled away into the wilds, where they could be independent, or have eliminated themselves in other ways, e.g. by committing murder. It is probable that the social history of Iceland, settled as it was by unbridled individualists who would not brook any form of organized government, might throw some light on this process of taming the individual.

Nevertheless there is little doubt that, in the main, humanity is still Yahoo-manity. Alike in mentality and in *moral*, modern man is still substantially identical with his palæolithic ancestors. He is still the irrational,

impulsive, emotional, foolish, destructive, cruel, credulous, creature he always was. Normally the Yahoo in him is kept under control by the constant pressure of a variety of social institutions; but let anything upset an established social order, and the Yahoo comes to the front at once. The history of the past fifty years abundantly proves that man is still capable of atrocities equal to any in his record Not only have we lived through the greatest political and the deadliest natural convulsion, the Great War and the Tokio earthquake, but the Russian Revolution has outdone the French, and Landru the legendary Bluebeard, while for mingled atrocity and baseness the murders of Rasputin and of Alexander of Serbia are unsurpassed in

history. The painful truth is that civilization has not improved Man's moral nature. His moral habits are still mainly matters of custom, and the effect of moral theories is nugatory everywhere. Thus civilization is not even skin deep; it does not go deeper than the clothes.

Clearly it is risky to expose the inelastic nature of so stubbornly conservative a creature to new conditions at a rapid rate. He may not be able to adapt himself quickly enough, and his old reactions, which did little or no harm before, may become extremely dangerous. Yet this is just what has happened. Science has exposed the palæolithic savage masquerading in modern garb to a series of physical and mental shocks which have endangered his equilibrium. It has also enormously extended his power and armed him with a variety of delicate and penetrating instruments which have

often proved edge tools in his hands and which the utmost wisdom could hardly be trusted to use aright. Under these conditions the fighting instinct ceases to be an antiquated foible, like the hunting instinct, and becomes a deadly danger. No wonder the more prescient are dismayed at the prospect of the old savage passions running amok in the full panoply of civilization!

VI

Nor is this the final item in our tale of woe. A third and most sinister fact which has to be faced is that Civilization, as at present constituted, is very definitely a deteriorating agency, conducing to the degeneration of mankind. This effect of Civilization is nothing new, but has been operating, it would seem, from the beginning, though not probably as intensively as now: discovery, however, is very recent. It is quite indirect, unintended, and fortuitous, but cumulative, and in the long run has probably been a chief cause in the decay of States and civilizations, as well as an important factor in the

arrest of biological development which we have had to recognize.

A simple and easily observable sociological fact is at the bottom of the mischief. The different classes in a society have different birth-rates and death-rates, and the differences between these yield their several net rates of increase or decrease. Now, whereas under the conditions of savage life class differences can hardly exist or, at least cannot be accentuated, so that the whole tribe flourishes or perishes together, and among barbarians the upper classes have a very great advantage and the tribe recruits itself chiefly from the children of the chiefs, because the conditions of life are so severe that the lower classes are not able to rear many children: in

civilized societies these conditions are reversed. It is found that though both birth-rates and death-rates grow as we descend the social scale, so does the net rate of increase. Indeed, the highest or ruling class nowhere appears to keep up its numbers without considerable recruitment from below. So society, as at present organized, is always dying off at the top, and proliferating at the bottom, of the social pyramid.

The disastrous consequences of this sort of social organization may easily be apprehended, with a little reflection.

r) All societies, even those whose social structure is most rigid, have need of ability, discover it, and reward it by social promotion. But (2) as this promotion means passing into a class with a relatively inadequate rate of repro-

duction, the biological penalty attaching to social promotion is racial extinction. Thus (3) the ultimate reward of merit is sterilization, and society appears to be an organization devoted to the suicidal task of extirpating any ability it may chance to contain, by draining it away from any stratum in which it may occur, promoting it into the highest, and there destroying it. It is exactly as though a dairyman should set in motion apparatus for separating the cream from the milk, and then, as it rose, skim it off, and throw it away!

At present it is calculated that the highest classes in the chief civilized societies only reproduce themselves to the extent of fifty per cent. of their number in each generation, so that the

hereditary ability of half of them is lost in each generation. But even then the remainder is largely wasted. It is churned into froth and scum by social forces. For neither now nor at any time has social intelligence shown itself equal to devising a training for the youth of the highest classes that would provide them with adequate stimuli to develop their faculties, and to lead a strenuous life of social service. The children of the rich are tempted to live for 'society' in the narrower sense, which means frittering away one's life on a round of vacuous amusement; and they rarely resist the temptation.

Naturally it is difficult to trace the accumulation of ability in the upper social strata which is theoretically to be expected. On the other hand, in

some subjects at any rate, the symptoms of a world-wide dearth of ability are becoming unmistakable. The Great War, though it made abundantly manifest the prevalence of incompetents in high places, did not reveal the existence either of a great general or of a great statesman anywhere.

It is superfluous to insist either on the fatuity of a social organization such as this, or on the certainty of racial degeneration which it entails: but it may be well to draw attention to the rapidity with which these degenerative processes are at present sapping the vitality and value of our civilized races. The failure to reproduce does not, as in former times, affect merely the aristocracy in the highest social strata; it has spread to the whole of the pro-

fessional and middle classes, and to most classes of skilled labour. It is not too much to say that, with the exception of the miners, none of the desirable elements in the nation are doing their bit to keep up the population, and that its continued growth is mainly due to the unrestrained breeding of the casual labourers and the feeble-minded.

In the rest of the population its increase is checked by birth-control and the postponement of marriage, neither of which affects the undesirables. They are too stupid, reckless, and ignorant to practise the former, and have nothing to gain by the latter. Also, to make it quite certain that they shall form a true 'proletariate,' the wisdom of our rulers ordains that a knowledge of birth-control shall be a

(fatal) privilege reserved for the intelligent and well-to-do. They instruct the police to prevent it from penetrating to the poor and stupid-apparently from the mistaken idea that the State needs plenty of cheap labour and cheap cannon-fodder. So child-bearing remains compulsory for the wretched women of the poor, whereas elsewhere only those women produce children who desire them, and natural selection is thus allowed gradually to eliminate the temperament of the unwilling (and, therefore, probably less competent) mother.

The dysgenic effects of this classdiscrimination are further intensified by other tendencies: (1) The advance of medicine and hygiene has enormously diminished selective mortality in all

classes, and improved the chances of weaklings to survive and leave descendants. (2) The advance of philanthropy preserves them, especially in the lower classes, where formerly the mortality was largely selective and a high death-rate both counteracted an excessive birth-rate and increased the value of the survivors. The emotional appeal of 'baby-saving' goes so directly to the heart of civilized man that his head never reflects whether the particular baby is worth saving, and whether a baby from a different breed and with a better pedigree would not be better worth having. (3) Modern obstetrics save the lives of thousands of women, whose physique is such that in former times they would inevitably have died in child-birth. The result is

that child-birth is becoming more difficult. Also babies brought up on the bottle, which has an irresistible attraction for microbes of all sorts, are apt to be less healthy than those nourished in the more primitive manner.

(4) Lastly, the bastardizing, which used formerly to provide for a considerable infusion of the blood of the upper classes into the lower, has now practically ceased. Since the merry days of King Charles II, very few noble families of royal descent have been added to the peerage.

VII

Our civilization, therefore, carries within it the seeds of its own decay and destruction, and it does not require high prophetic gifts to predict the future of a race which goes the way marked out for it by such perversely suicidal institutions. It cannot improve, but must degenerate, and the only question would seem to be whether the decadence of Man will leave him viable as a biological species. At present it looks very much as though his blind leaders would lead their blinder followers from catastrophe to catastrophe. through imperialist world-wars to classwars and to race-wars: but even if, by some miraculous rally of human intelli-

gence, these convulsions should be averted, the prospect will not really be improved. The violent destruction of the human race by war will only be more dramațic: it will not be more fatal than its gradual decay as its arts and sciences slowly fossilize, or peter out, in an overwhelming flood of feeblemindedness.

VIII

This is the one alternative. We shall get to it, if we go on as we are going: but it is not our doom. The alternative is to exorcize the danger by an adequate reform of human nature and of human institutions. This again seems attainable in at least two ways.

The first, and more paradoxical, of these would make a direct frontal attack on the palæolithic Yahoo, and try to bring about his moral reformation. The means for this purpose are ready to hand. Christian ethics have been in being, as a moral theory, for nearly two thousand years. If the Yahoo could be really christianized, he would at any rate cease to cut his own

throat in cutting his neighbour's. And it is astonishing how much scientific support is forthcoming for the paradoxes of Christian ethics. It is an historical fact that the meek have a knack of inheriting the earth after their lords and masters have killed each other off, and that passive resistance wears out the greatest violence, and conscientious objection defeats the craftiest opportunism, if only you can get enough of them. It is a biological fact that the rabbit survives better than the tiger; and the same would appear to be true of the human 'rabbit' and the Nietzschean 'wild beast.' Intrinsically, therefore, Christian ethics might be well worth trying.

I wish I could believe it likely that this policy will be tried. But the palæolithic

Yahoo has been dosed with Christian ethics for two thousand years, and they have never either impressed or improved him. Their paradoxes give him a moral shock, and he has not brains enough to grasp their rationality. He will exclaim rather with the gallant admiral in the House of Commons. when justly indignant at the unheard-of notion that a 'moral gesture' of a Labour Government might be the best policy, "Good God, sir, if we are to rely for our air security on the Sermon on the Mount, all I can say is, 'God help us'!" Besides, the proposal to put Christian principles into practice would be bitterly opposed by all the Churches in Christendom.*

^{*} This does not mean, of course, that there are no Christians in the Churches, but only that they are not in control of these institutions.

It may be more prudent, therefore, to try a safer though slower way, that of the eugenical reform and reconstruction of our social organization. As to the possibilities in this direction, I incline to be much more hopeful than either Mr Haldane or Mr Russell. Mr Haldane despises eugenics, because he is looking for the more spectacular advent of the 'ectogenetic baby,' to be the Saviour of mankind. But he might not arrive, or be seriously delayed in transmission, or fail to come up to Mr Haldane's expectations; and, meanwhile, we cannot afford to wait.

Mr Russell distrusts eugenics, because he fears that any eugenical scheme put into practice will be 'nobbled' by our present ruling rings, and perverted into an instrument to consolidate their

power. He thinks that dissent from dominant beliefs and institutions will be taken as proof of imbecility, and sterilized accordingly,* and that the result would merely be to spread over all the world the hopeless uniformity and commonplaceness of the ideals and practice of the American business man, as depicted by Mr Sinclair Lewis.

This prognostication would be very plausible, if we supposed eugenics to be introduced into the social structure from above, privily, and in small doses, and by way of administrative order, as under the existing Acts to check the spread of feeble-mindedness.

But this method would be impracticable. It would not generate anything like the social momentum necessary to

^{*} Icarus, p. 49.

carry through any radical reform. To make it effective, it would have to be backed by a powerful, enthusiastic, and intelligent public sentiment. This presupposes that the public has been biologically educated to appreciate the actual situation, and has been thoroughly wrought up about the fatuity of our social order, and understands what is wrong with it. If it understands that much, it can also be made to see that it is fantastic to expect to leap to the Ideal State by a social revolution. No one now knows what the institutions of an Ideal State would be like, nor how they would work. We only know that they will have to be evolved out of our present institutions, even as the Superman has to be evolved out of the primitive Yahoo. In either

case, the process will be gradual, and its success will depend upon details, on taking one step after another at the right rate in the right direction, making a new adjustment here, overcoming an old difficulty there, removing obstacles, smoothing over the shell-holes and scars dating from Man's lurid past, and, in general, feeling one's way systematically and scientifically to better things. Such a mode of progression may seem unheroic, but it has the great advantage that it is unlikely to go irretrievably wrong. If we know from the outset that we are tentatively feeling our way, we shall always be on the look out for traps and possibilities of going astray, trying out the value of our policies by their results, and willing to retrace our

steps when we have made a false one.

The social temper, therefore, will become far more intelligent and reasonable than it has been hitherto. It will be slow to dogmatize, and will regard the toleration of differences of opinion as among the cardinal principles of a sanely progressive social order. For as we can no longer assume, with Plato and the other Utopians, that perfection may be postulated, provision has always to be made for the improvement of the social order. It can never be accepted as absolutely good, but must always be regarded as capable, in principle, of being bettered. Even the best of established institutions are only good relatively to the alternatives to which they showed themselves superior: under changed

conditions they may become inferior, and may fail us, or ruin us, if we do not make haste to transform them into something better fitted to the new conditions. Hence the social order must be plastic, and must never be allowed to grow rigid. There must always be room in it for experiments that have a reasonable prospect of turning out to be improvements. For progress will depend on the timely adoption of such novelties.

But society has no means of commanding them at will. It has to wait till they occur to some one. As biological variations have to arise spontaneously before they can be selected, so valuable new ideas have to occur in a human mind before they can be tried and approved. Society

cannot originate discoveries, it can only refrain from so organizing itself as to stamp them out when they occur. It is vitally necessary, therefore, that we should beware of suppressing variations, whether of thought or of bodily endowment, that may prove to be valuable.

Also, of course, we shall have to realize that our whole procedure is essentially experimental, and all that this implies. We do not know, at the outset, what would be the best obtainable type, either of man or of society; true, but we mean to find out. Nor is it unreasonable to expect to do so as we go along. We start with a pretty shrewd suspicion that certain types, say the feeble-minded, the sickly, the insane, are undesirable, and that

no good can come of coddling and cultivating them: we similarly are pretty sure that certain other types, say the intelligent, healthy, and energetic, are inherently superior to the former. We try, therefore, to improve and increase the better types. How precisely, and how most effectively, we do not quite know, though we can make pretty good preliminary guesses. So we try. That will entail experimentation in a variety of directions, with 'control experiments,' and a modicum of mistakes. But our mistakes will not be fatal, because if we advance tentatively and with intelligent apprehension, we shall realize them in time, and shall not feel bound to persist in any course that yields unsatisfactory results.

It is really one of the great advan-

tages of eugenics that it cannot proceed upon any cut-and-dried scheme, but will have to be guided by the results of experiment and the fruits of experience, each of which will be followed and discussed by an intensely interested public. For the difficulties of eugenics are all difficulties of detail, and intelligent attention to detail may overcome them all. Thus the dysgenical working of civilized society, which has come about unintentionally through the unfortunate convergence of a number of tendencies, may be altered similarly, by changing the incidence of social forces.

If scientific eugenics can put a stop to the contra-selection incidental to civilization, Man will recover the plasticity and the progressiveness he once possessed, and will be able to evolve further—in whatever direction seems to him best. We need not take alarm at this possibility, for with his superior knowledge he may surely be trusted to make a better job of his evolution than the Lemur and the Pithecanthropus, who were our progenitors and managed to evolve into modern man.

But the process will necessarily be a slow one, even though a comprehensive scheme of eugenics will be providing simultaneously *two* sources of improve-

ment, by the elimination of defectives at the bottom of the social scale, and by the increase of ability at the top. As, moreover, time presses, and sheer destruction may overtake us before eugenics have made much difference, it would be highly desirable if some means could be found to accelerate the change of heart required. For this purpose, I am much less inclined to put my trust in the advance of pharmacology than Mr Haldane and Mr Russell. Hitherto new drugs have only meant new vices, sometimes (like cocaine) of so fascinating a character as to distract the whole police force from their proper function of repressing crime. So it seems legitimate to be very sceptical about moral transforma-

^{*} cf. Daedalus, p. 34; Icarus, p. 54.

tion scenes to be wrought by pills and injections.

On the other hand there does seem to be a science from the possible progress of which something of a sensational kind might not unreasonably be expected. It is, moreover, the science most directly concerned with affairs of this sort. Psychology, the science of human mentality, is, by common consent, in a deplorably backward state. It has remained a ground for metaphysical excursions and a playground for the arbitrary pedantries of classificatory systematists. efforts to become scientific have only led it to ape assumptions and to borrow notions found to be appropriate in sciences with widely different problems and objects. The results, as the

psychologists themselves confess, are meagre and disappointing; which, of of course, only proves that the borrowed notions are inappropriate and incapable of making Psychology into an effective science. But if psychologists should take it into their heads to settle down to business, to recognize the primary obligation of every science to develop methods and conceptions capable of working upon its subject-matter, and so tried to authenticate their 'truth' after the ordinary fashion of the other sciences, namely by the pragmatic test of successful working, some surprising effects might be elicited even from the actual human mind.

For there is reason to suppose that its present organization is very far from being the best of which it is

capable. It has come about in a very haphazard manner, and we are not at present making anything like an adequate use of all our powers. Hence by changing the gearing and re-arranging the traditional coupling, so to speak, of our faculties, improvements might conceivably be wrought which would seem to us to border on the miraculous. Thus a pragmatically efficient Psychology might actually invert the miracle of Circe, and really transform the Yahoo into a man.

I have endeavoured in this very summary sketch to show that the doom of Tantalus is by no means unconditional, and that he can save himself if he chooses, and that by no superhuman effort, but merely by recognizing facts that are right before his nose and well within his comprehension, and by a little clear thinking upon their import. But I would not presume to predict that he will save himself: history affords no unambiguous guide. It seems to show that something worse and something better than what actually happens is always conceivable, and that neither our hopes nor our fears are ever fully

realized. If so, poor Tantalus, hoping against hope, fearing against reason, may muddle along for a good while yet, without repeating either his ancient error of imagining that he could sup with the gods, or his modern folly of using his reason, as Goethe's Mephistopheles declared, only to become more bestial than any beast!

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